

## **WEG'S NEW WQUATTRO SUPER PREMIUM EFFICIENCY MOTOR EXCEEDS THE REQUIREMENTS OF IMPENDING IE4 CLASSIFICATION**

WEG's new WQuattro line of super premium efficiency motors employs a hybrid design to achieve the highest efficiency in the market, exceeding the requirements of the impending IE4 Super Premium Efficiency classification across its entire output range.

The WQuattro line has been developed for users who consider energy saving a major priority. It is an environmentally-friendly range of motors that, due to its highly efficient performance - with no energy (joule) losses from its rotor - demands less energy from the grid. For the user, this translates into lower total cost of ownership, a reduction in CO2 emissions, and a faster return on investment.

The WQuattro is a hybrid motor integrating a conventional three-phase distributed winding, and a rotor with an aluminium cage and internal high energy magnets. This combination makes the WQuattro ideal for direct- on- line starting and acceleration up to synchronous speed. With this type of operation the motor speed does not vary with load, despite overload variations, or cases of voltage drop, as long as the mains frequency is kept constant. In addition, there is no requirement for positioning/speed sensors, or special protection relays, and the low bearing temperatures that result from synchronous operation also ensure longer life and reduced maintenance for the motors.

Where the speed of the motor needs to be adjustable, the WQuattro can be used with inverters (V/F and Vector types), offering an extended speed range with constant torque. In addition inverter control also offers the key benefit of multi-motor operation: i.e. several motors can operate in synchronism fed by the same inverter.

Importantly, the WQuattro line offers interchangeability with existing installations. It employs the same frame size for output as standard induction motors, and so it is easy to retrofit into existing applications.

The WQuattro line is available in 4 and 6 pole versions, with frame sizes from 80 to 132S, and outputs of 0,37kW up to 7,5 kW. The motors benefit from class F insulation, and are suitable for operation on 230/400, 400/690 or 525V supplies.

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